Claims

1. A communication processing apparatus for executing a communication process via a network, characterized in that:

a communication process related to an authentication process according to a predetermined authentication method is performed in order to acquire secret information permitted to be disclosed only to devices in a local network corresponding to said authentication method;

unique identification information of a communication destination device in said communication process is acquired by data processing at a network layer or lower of an OSI reference model;

unique identification information of an authentication partner device is acquired in an authentication sequence of said authentication method as data processing at an application layer of the OSI reference model;

said acquired unique identification information identification information of said communication destination device is matched with said acquired unique identification information of said authentication partner device; and

in accordance with a passed or failed state of the matching, a process is executed to judge whether said

authentication partner device is a device connected to a same local network as a local network to which a local device being a communication source device is connected.

2. The communication processing apparatus as claimed in Claim 1, characterized that at least one of said unique identification information received from said communication destination device is received as processed data generated by an encryption process or a hash value generation process based on secret information shared with said communication source device.

3. The communication processing apparatus as claimed in Claim 1, characterized in that identification information received from said communication destination device is a node unique ID defined in IEEE 1394 standards.

4. The communication processing apparatus as claimed in Claim 1, characterized in that:

said communication processing apparatus is configured to receive, as identification information received from said communication destination device, identification information acquired by a PHY communication unit of said communication destination device and identification information acquired by a network communication unit of said communication destination device, and match a plurality of these

identification information.

5. The communication processing apparatus as claimed in Claim 1, characterized in that identification information received from said communication destination device is a device address defined in communication standards.

6. The communication processing apparatus as claimed in Claim 1, characterized that said communication processing apparatus is configured to receive, as identification information received from said communication destination device, a device address as a source address of a packet transmitted from said communication destination device, and a device address stored in a packet by data processing at an application level or data based on the device address, and match a plurality of these device addresses.

7. A communication controlling method for executing a communication process via a network, said method characterized by comprising:

an identification information acquiring step of acquiring unique identification information of a communication destination device in a communication process by data processing at a network layer or lower of an OSI reference model, and acquiring unique

identification information of an authentication partner device in an authentication sequence of a predetermined authentication method as data processing at an application layer of the OSI reference model;

a matching processing step of performing a matching of said acquired unique identification information identification information of said communication destination device with said acquired unique identification information of said authentication partner device; and

a judging step of judging, in accordance with a passed or failed state of the matching, whether said authentication partner device is a device connected to a same local network as a local network to which a local device being a communication source device is connected.

8. The communication controlling method as claimed in Claim 7, characterized in that in said identification information acquiring step, at least one of said unique identification information received from said communication destination device is received as processed data generated by an encryption process or a hash value generation process based on secret information shared with said communication source device.

9. The communication controlling method as claimed in Claim 7, characterized in that identification information

received from said communication destination device is a node unique ID defined in IEEE 1394 standards.

10. The communication controlling method as claimed in Claim 7, characterized in that said identification information acquiring step is a step of receiving, as identification information received from said communication destination device, identification information acquired by a PHY communication unit of said communication destination device and identification information acquired by a network communication unit of said communication destination device, and said matching processing step matches a plurality of these identification information.

11. The communication controlling method as claimed in Claim 7, characterized in that identification information received from said communication destination device is a device address defined in communication standards.

12. The communication controlling method as claimed in Claim 7, characterized in that:

said identification information acquiring step receives, as identification information received from said communication destination device, a device address as a source address of a packet transmitted from the communication destination device, and a device address

stored in a packet by data processing at the application level or data based on the device address, and

said matching processing step matches a plurality of these device addresses.

13. A computer program for executing a communication process via a network, said program characterized by comprising:

an identification information acquiring step of acquiring unique identification information of a communication destination device in a communication process by data processing at a network layer or lower of an OSI reference model, and acquiring unique identification information of an authentication partner device in an authentication sequence of a predetermined authentication method as data processing at an application layer of the OSI reference model;

a matching processing step of performing a matching of said acquired unique identification information identification information of said communication destination device with said acquired unique identification information of said authentication partner device; and

a judging step of judging, in accordance with a passed or failed state of said matching, whether said authentication partner device is a device connected to a same local network as a local network to which a local

device being a communication source device is connected.